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## Kepler and His Custody; Scholarship and Conservation Policy

Johannes Kepler ends the preface to his *Harmonice mundi* of 1619 with these sentiments: "The die is cast; my book is written, to be read either now or posterity, I don't care. It may wait a century for a reader, much as God has waited six thousand years for an audience."<sup>1</sup> This moving statement of faith epitomizes the conservator's cause before the world of scholarship. Its sentiments are worth remembering; for if our libraries are to survive, their cause will need to be supported by the modern Keplers who use them, and who expect them to keep their work around for readers a century from now.<sup>2</sup>

What really can be expected from our scholarly researchers, thousands of them strong, spread across a Babel of disciplines and inquiries around the world, each of them preoccupied with the importance of their efforts and their centrality to learning and to the human condition? The researcher's first contribution is to the dialogue on policy; and it is problematical insofar as it is ideological and political. The second involves practices of handling library materials; and it is basically so self-obvious as to be insulting. The third involves the prospect of better control over access and use; and it is painful to consider. All three involve commitments by scholars that are essential to the survival of our libraries; and each involves deeply felt attitudes, ingrained as part of the practice of their art, science, or craft. The 1976 Association of Research Libraries (ARL) *Detailed Specifications* are right in affirming "the fundamental requirement that preservation...be seen as an inseparable part of the broader objective of extending access to recorded information...."<sup>3</sup> The problem is merely one of reconciling diachronous access and synchronous access: in order for Kepler to be accessible tomorrow, what must we do, and ask readers to do, today?

It should be obvious, at the outset, that the aim of conservation is *not* to provide more materials for future generations to continue to conserve. Use of library materials has to be the aim: consulting, reading, experiencing and handling books. This fourth verb is the problem. Readers, no matter how fastidious their habits, will inevitably weaken the physical item in the act of handling it. Our growing awareness of the implications of the fact has been overshadowed by the very circumstance to which we attribute great libraries in our day, namely our pragmatic philosophy of library service. Serve our readers; the more our books are used, the better we achieve our objectives; and knowing what books are used, the more we can devote our attention to similar books so as to make our efforts and institutions the more useful; and the more we should concentrate our limited funds on immediate needs, such as will enhance this year's readership and next year's appropriations. Work for the definable objective, and, for the rest, dream and pray. The prevalent philosophy of librarianship, however praiseworthy in its own right, can obviously work against the objectives of library conservation, and of Kepler's vision. The fact remains that even Kepler tells us that his book is waiting for a reader. Ranganathan had it right in his first law: books are for use, the only questions being when and how.

When we get around to writing the history of the modern library conservation movement, two events will probably stand out. One was a disaster—namely, the Florence flood of 1966. The other was the recognition of a handling problem, specifically, the discovery that the card catalog at the New York Public Library, as it was documenting the fact that a great institution had fulfilled its mission gloriously, was also suggesting that the institution as well as its catalog was working its way out of existence. The awareness of our handling problems goes back even further, of course. When William Blades included bigots, servants, and children among his enemies of books,<sup>4</sup> he did so in an "Upstairs-Downstairs" context that already suggests the recurring questions of "elitism." Randolph Adams's addition of librarians to the hit-list,<sup>5</sup> in retrospect, now seems intended for the purpose mostly of delivering a Calvinist sermon to the damned, thereby lining up the service-minded library profession against the cause of rare books and, with Blades in mind, of conservation as well. The list of enemies, of course, is much larger. The fullest catalog, to my knowledge, is one proposed some twenty-five years ago by Robert Land, who sees it as ranging "from religious zealots to unconscionable forgers, from brilliant scholars to ignorant housemaids, from collectors with delicate sensibilities to second-hand furniture dealers with indelicate sensibilities, from efficiency experts to inefficient file clerks, from royalty and the families of Presidents to butchers, bakers, and candlestick makers, and from censors to grangerizers."<sup>6</sup>

The greatness of modern libraries has clearly been our reward for a profound concern for service to all of these; and to question its ideal would be both impolitic and wrong. But some basic distinctions do need to be kept in mind. There is a mighty important difference, for instance, between the library that stocks paperbacks to be worn out and discarded, and the librarian who condones theft and mutilation on grounds that the books are "at least getting used." Failure to be sensitive to the difference makes ours an uphill battle. Unless and until our cause can be understood, conservators will end up facing a mighty formidable, if fuzzy, array of ideological opponents. In that they may appear to withhold books from an enlightened populace, they line up against Thomas Jefferson, John Stuart Mill, and even Karl Marx. In their concern and affection for historical materials, they find themselves attacked by the old guard of social Darwinism and the new elite of the "paperless society." Finally (the crowning insult), to the heirs of Sigmund Freud, conservators will be seen as displaying psychopathological symptoms that will be labeled as "anal-retentive."

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Under the circumstances, Kepler needs to come over to our side; we need his help. God can take the longer view of human destiny; but if Kepler's book is to be around a hundred years from now, Kepler will have to see himself not as part of the problem but as part of the solution. Back in the 1780s, soon after modern copyright was first established and as its impact was just coming to be sorted out, William Blackstone made a landmark analogy: the rights of an author to the rewards for personal creative efforts need to be counterbalanced by the rights of society to access to those ideas. So today's access needs to be counterbalanced by the rights of tomorrow's researchers. In devising our programs we need Kepler's support, and his insight as well. It may be impossible and even dangerous to presume who among today's Keplers will be rediscovered in, say, A.D. 2050, 2250, and 2550; who will rediscover them; for what reasons; and with what effects.<sup>7</sup> The best we can do is talk to the Keplers of today, and learn how they are consulting the present record. There are, indeed, different kinds of research use, determined in great part by our different kinds of scholars, and with different conceptions of library conservation appropriate to each. Adapting another classic notion of Randolph Adams,<sup>8</sup> for instance, we might distinguish (1) general admirers from (2) readers interested mostly in the intellectual content and (3) bibliographers working with the physical items.

With significant—and inevitably, highly significant—exceptions, the "high spots" in our collections are there mostly to be gazed at in the exhibition cases (or, as Adams grumbled, to be pawed over by the local Boy

Scouts). When last, as library administrators have been heard to muse, did anyone sit down and actually *read* a Shakespeare folio? Some books are like religious relics in a baroque monastery, more the *verum corpus* than the *sanctus spiritus* of our civilization; and for much of the public we serve, the act of worship is of profound significance. This situation will be particularly maddening to the zealous ascetics among us who come to be narrowly preoccupied with the intellectual content of our collections.

Admittedly, even the robust hedonists among us still able to confess our love for books will be bothered to see how conservation funds become available for the spectacular but unused treasure, rather than for the tired but loyal reference book. Faith, not necessarily supported by any questioning spirit at all, has nourished and probably will continue to nourish our collections and our conservation programs more than we care to admit.

In contrast, there is library use that is commonly seen as involving the text exclusively: the ideas and their incorporation into a verbal (or mathematical, or musical; in any event, a formal) message. When the text can be shown to be the only thing that matters, the conservation options are different, as cheap and as numerous as they are obvious. Convert to another medium, be it film, reprints of widely consulted work, or digital storage; discard the original; and then worry about preserving the surrogate medium. We have long done this with newspapers, and no doubt the practice will come to be extended to more and more library materials.

Preservation of a sort can be accomplished through a transformation of the medium. In the history of civilization we have seen our intellectual diasporas; and in folk legend we have heard about Tarnhelms in the service of Valhalla. (One hopes for happier outcome.) The very principle of transformation of medium is profoundly disturbing insofar as it assumes a necessarily simplistic answer to the question of what constitutes the text itself. What is "original evidence"? The text, for instance, consists of both symbols and contexts. The latter must not be forgotten now if use of documents rather than mere preservation is the ultimate goal. Reading the *New York Times* on a rush-hour subway is simply not the same as reading it in front of a microfilm reader. (Part of the difference, as others have observed, is that you can't wrap fish in a microfilm.) Abrams art books simply do not look the same on coated paper and on screen projections. The images do not read in the same way: the very content is different, in ways that make the word *aesthetic* at once highly appropriate, much too broad, and very fuzzy.<sup>9</sup> Scholars working on the 1930s can gather some very meaningful impressions by comparing English paper and presswork with their German counterparts; but detailing the exact differences confounds the imagination. Even so, more library materials will surely need to be converted to nonprint media, and even conceived in terms of these media.



At this point, we must introduce our third group of readers, whose concern is "not the life-blood of a master spirit but a collection of pieces of paper with printing on them."<sup>10</sup> Our bibliographers will clearly understand the Platonic distinction between the physical and the intellectual book.<sup>11</sup> They might then also appear to be the conservator's true soul mates. Alas, not necessarily so. Eventually they usually will want to dig into the gutters and bend back the headcaps in search of a cancel stub, or perform irreparable minor surgery with a penknife or even a ball-point pen. They have been known to dangle large folios by a single leaf as they hold the sheet up to the light in search for the chain lines or watermark. And asked what to do with a book that is falling apart, they will consider and reply, "nothing at all." Meanwhile, our crystal balls threaten us with the prospect that these readers will consist of more and more of our visitors. The reasoning behind such a prospect, admittedly, is probably too obvious to be trustworthy. Even so, the justification of our conservation efforts for bibliographical study is a particularly compelling one, especially insofar as our bibliographers serve to epitomize the scrupulous scholar's passionate search for and commitment to what lawyers call "best evidence."

Familiarity with the practices and intentions in creating library materials should qualify our bibliographers to help us in addressing the question of context just mentioned. The thought of playing God, consigning some originals to oblivion but not others, is acceptable and flattering enough for any scholar; but finding authoritative grounds on which to do so is another matter. What *exactly* is there about reading John Dryden in an original folio that is different from reading him in a new paperback? To turn to timely examples, should any library really wish to bind the latest copies of *Harper's*, or the *Times Literary Supplement*, or *AB/Bookman's Weekly* or even *College & Research Libraries* (let alone *CRL News*)? Specifically, is there really enough—or anything—lost in content through consulting a film or photocopy, so as to justify the expense in binding and maintaining the originals? The bibliographer might perhaps be excused for begging off the decision on whether *Playboy* demands color film rather than black-and-white; but for expertise based on the practices of printing, the aesthetics of the graphic arts, and the likely dangers of "best evidence" being lost, the bibliographer is very much needed.

Ultimately, however, each of our three "special interest lobbies" has to be seen as contributing part, but not all, of the solution to our problems. Admittedly, the reasoning for this pluralism may not look all that good: our best defense is to confuse the issue through the bold, romantic plea that "the medium is the message." We must fall back on that sentimental and libertarian notion of the "unity of learning." In specific instances, one of our three prototypical readers may emerge as the likely objective in guid-

ing a conservation decision; but for conservation policy in general, all three must be recognized.

No less problematic, meanwhile, is the question of who we talk to as the representative of our readership. The topic is filled with ironies. For instance, in an age of specialization, the more eminent the scholars, the more limited their perspective and the more unreasonable their demands are likely to be. Given an opportunity to help, they will typically devise exciting, new, and very expensive "state-of-the-art" models rather than address present predicaments. The doctoral students who rewrite their professors' dissertations are no great problem. Those who rewrite history and who realign our disciplines are the ones who ruin our programs, louse up our classification schemes, and prove to us that we have been preserving the wrong materials.

But can we expect much more by turning to that fashionable world of library user studies? The consensus to date, naturally, suggests that more work needs to be done.<sup>12</sup> And the notion of dynamic scholarship by its very nature implies that today's findings may be inappropriate tomorrow. Even so, a good deal of damage has already been done. The simplistic patterns have so far suggested that new books are consulted more often than older ones, and thus that books are most likely to be consulted within the first few years after their appearance. Besides infuriating our historians, the immediate implications have naturally been to work against the cause of conservation in general: why preserve what so few will ever use? More precisely, the enlightened but politically sensitive administrator will inevitably ask why so much of a budget should be given over to materials that stand the lesser chance of being consulted.

The standard advice for librarians, however, has long been to go to those who have most benefited from the collection for advice and support. The instincts of a seasoned scholar—preferably, of course, one of wide experience and long involvement—are likely to be able to tell us whether the new bibliography will allow us to discard the superseded one, or retire it to the stacks, or restore it to stand next to the new one on the reference shelf, or refurbish it for the rare book room. Our user studies mostly are still too stochastic to tell us even whether our Kepler editions are being used by students or professors who are unable to get their call numbers right, or by admirers on their pilgrimages, or by students needing simply to verify citations, or by astronomers about to discover a relationship that has been neglected for 350 years.

Related to these aspects of our dialogue with scholars, of course, is the sheer burgeoning complexity of learning today. The one big feuding family may be what keeps the library fairly neutral and honest; it is also the source of the best advice and the worst advice we will ever get. The conservation dialogue is comparable in some ways to the acquisitions

dialogue. The point is worth making, although there are some basic differences, the obvious one being a comparison of the fifteenth- and the nineteenth-century historian. In acquisitions, we can usually dismiss the former with travel money while we build a collection for the latter; in conservation, on the other hand, we can usually take the former quite seriously in his concern for working on our local holdings, whereas for the nineteenth-century specialist we need to mumble assurances about mass deacidification being just around the corner. But pursuing this matter in any productive detail would quickly get into deep waters of another kind; let us instead briefly turn to a second major topic, the question of getting our Keplers to handle materials properly.

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The basic problem is that proper handling is so much a matter of mere thoughtfulness. Outright malice does indeed take place—scribbling, articles razored from a periodical, defacement. Mark Twain once announced his preferences for a thin book because it would steady a table, a leather volume because it would strop a razor, and a heavy book because it could be thrown at a cat;<sup>13</sup> and as we chuckle, perhaps we should make sure that his books be kept in an area apart from that keeping our Keplers. In fact, thoughtless mistreatment is much more common than mischievous. And it is most likely to occur in the moment of use, which is also likely to be the moment of discovery. The flash of insight too easily blinds the reader to that essential quality of content and form, of intellectual book and physical book. It probably follows that the more inspired the reader, the greater the danger.

The ensuing mischief, unfortunately, is also likely to resemble the great moments of Harold Lloyd, Buster Keaton, or Laurel and Hardy. The key ingredient is preoccupation. And no rational instruction or admonition can anticipate its forms, except to observe after the event that the worthiest of intentions are customarily undermined by glorious spectacles of human fallibility. For this reason, as others have remarked, the Universal Book Tester may fail us for being too rational.

The cause is almost always undermined by an honest and direct appeal to reason. This very point, I sense, was well recognized in that admirable slide show developed by the Yale conservation program last spring. Some of its scenes are simply too delicious to be true—except that we have all seen similar circumstances, and all too often. One more of Blades's enemies, alas, has to be identified under the heading of sheer slapstick.

Thus while we should defer to his great experience, it may be hard to agree with Edwin Williams's recent lament that the mishandling of books

is increased through administrative patterns requiring the senior staff to delegate the day-to-day work in the collections to less respectful juniors.<sup>14</sup> It is standard etiquette for old-timers to regret publicly their inability to work with the books any longer; and bless them all for expressing these regrets. In fact, handling is probably best done by the most alert and least preoccupied members of the staff; inculcating respect is much of the problem. As for the library readership, mass-printed instructional reminders, as brief as possible—such as are found at the reader's desk in major research libraries, but which might also be inserted today at a circulation desk—are probably well worth the effort.<sup>15</sup>

Digressing from the topic for the moment, let me propose that there is one simple resolve among all others that needs to be forced through, with as much noise, solidarity, and urgency as possible. Too much of our photocopying equipment calls for the most unnatural act that a book can be subjected to. Flipping a book over facedown on a copying plate too clearly shows an utter disregard for the physical construction on cords and covers, all the more so in that it requires lifting off, turning right-side up, and then flipping over for each page-turn. The only possible benefit could be an exposure of the basic danger in oversewing, admittedly; but this price is much too high to pay. Much like the Luddites 150 years ago who broke up the looms in the English Midlands, so perhaps we need our sledgehammer—wielding Xerites (or Savites) today—the “Carrie Nations of Conservation” brigade, perhaps—at least until such times as the ALA, SLA, ARL, and NCLIS can demand copying machines that photograph from above, in the manner of a hospital X-ray. Such observations are not meant to disparage the photocopy as an aid to scholarship. On the contrary, the camera has been a vast and unsung benefit to learning, saving time, insuring an accurate transcript of a text, and making possible the comparison of distant copies side by side. Along the way it has no doubt saved wear and tear on books as well. Rather, the price we have been paying is too high insofar as it was, and really continues to be, so *unnecessarily* destructive.

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The third contribution Kepler can make to his cause would appear to be the most painful and counterproductive of all: the library can be used under diminished and restricted circumstances. The mere suggestion has, of course, more than once evoked a classic response: fire the librarian! The topic is one that still needs to be addressed. Selling it to our researchers—in effect, asking them (as B.F. Skinner might have it) to forgo their freedom and dignity—could be less of a problem than determining what exactly they might appropriately be asked to forgo.



Indeed, there is a wide range of precedents involving readers working under circumstances more restricted than we generally know today. The idea that libraries should provide for circulating collections at all, in fact, is mostly a product of the eighteenth-century Enlightenment. Even through the nineteenth-century, great "reference" libraries continued to be established, this term set up in contradistinction to the "circulating" collections. Among research libraries in Europe today, the so-called *Präzensbibliothek* is the rule more than the exception.<sup>16</sup> Special dispensations over the years, and the pressure to attract greater readership, have inevitably tended to relax our policies. This liberalization took place, of course, in those innocent days before our conservation predicament was even recognized.

The inconvenience of reading on the premises as opposed to taking the books to the study or home is in many ways analogous to taking the trouble to go to a play or concert instead of watching the play on television, or hearing the music at home. Those who go to the effort swear by their practices to the point of exhilaration if not of boredom: one sees, learns, understands more by consulting a book in its proper library context, even if it means, along the way, eating German food or arguing with Paris merchants or coping with Italian plumbing or freezing in February in the Bodleian. Furthermore, at the library one meets kindred spirits, becomes part of the gossip circles, and is stimulated to explore unsuspected fields.

Do readers actually learn more from reading under restricted conditions? And are noncirculating copies really likely to be handled any better than circulating ones? Both ideas seem plausible; but testing either would be quite impossible. What is almost certain is that restrictive policies that are conspicuously wise are also impossible. The best of intentions usually produces another fine range of ironies, conundrums, anomalies, Catch-22s, exposed flanks, and vicious circles. Calling on our Keplers for help in setting up intelligent programs, and asking their indulgence in forgoing access—these are likely to be lesser problems than those we will face later on as we ask them for help and sympathy when things go wrong. Let me identify some of the likely problems that will arise.

First, what should be restricted? The decision has actually already been addressed fairly extensively and quite intelligently. Curiously, the basic criteria for "what makes a rare book" identify the targets for conservation, but for somewhat different and strange reasons. Scarcity, for instance, justifies attention in that it reminds us of our precarious ties with the past; the dealer's market value rises with a conservator's anxiety. As for market value, it offers conservators their most convincing cases in arguing with business-minded administrators. Date of publication can also be a handy expedient insofar as it enables us to devote attention first to those easy problems from the age of handmade paper, deferring to later the acid

problems of the nineteenth and twentieth centuries. Add to this the fact that our bibliophiles are the readers most likely to be attentive and sympathetic to the condition and handling of physical books, and the rare-book context of conservation becomes clearly understood.

Paul Banks is among the first to specify a different criterion called "permanent research value."<sup>17</sup> His term is characteristically sensible and his case typically persuasive; alas, the more closely we look at the idea, the less happy it becomes. The basic problem is the dynamic nature of research itself. If we accept a Baconian definition of science, we can proceed in comfort. We are now accommodating the doctoral students who rewrite their professors' dissertations; and eventually we will be maintaining libraries to be worshiped as much as fought over. But for better or worse, Baconian science is now past us. Researchers now think of "paradigms," arising, changing, and disappearing with later "scientific revolutions." Even our historians enjoy evoking the concept of "revisionism," whether noisily or implicitly. This search for new perspectives, of course, is precisely what produces what Gordon Ray once identified as the "fertile chaos" of scholarship. Rather than proposing that there is any such thing as "permanent research value," we might better remember that most anything—and therefore everything—has potential value. If Bernard Bailyn is justified in advising us to preserve "latent" as well as "manifest" history,<sup>18</sup> how can we ever wish to save anything less than the totality of the record of civilization? Thomas Tanselle, for instance, argues effectively for preserving book jackets<sup>19</sup> and for collecting other than first editions.<sup>20</sup> Such visions are what keep our research librarians young in spirit as they continue to scramble for the document they just threw away.<sup>21</sup>

One genre in particular, meanwhile, may deserve special isolated treatment. Periodicals are an endless and limitless nuisance to librarians, but they are also the very lifeblood of scholars; and while no drastic action seems appropriate just now, for several reasons we may need to consider extensive and arbitrary restrictions very soon. However hopelessly ill-defined the genre itself, whatever it is, is eating up more and more of our budgets. Its internal content is under weak bibliographical control through conventional cataloging, and thus readers will want to browse. This last factor, and the relatively predictable short-term growth patterns, probably argue against compact storage at the same time. The contents, in their customary brevity, are particularly vulnerable to the devastation of the copying machine, all the more's the pity since these are books that so often have been oversewn. If any one area needs attention more than others in the stacks, this is probably the one.

In discussing specific materials, that flamboyant notion of an "endangered titles list"<sup>22</sup> may yet be worth scholarly consideration. The problem lies not with the sentiment behind the ecological analogy but with the

extravagant implications of the idea. Of the (wildly guessing) 30 million titles issued since Gutenberg's day, an amazing and disturbing proportion exist in single recorded copies. (Of the early Low German titles in Borchling and Classen for instance, Taylor Starck tells us that 60 percent exist in single copies, and only 14 percent in three copies or more.<sup>23</sup> Modern titles—Wright American fiction, for instance—survive better; but when—to paraphrase Huxley on Pope—do we have enough copies to be out of danger?) Furthermore, bibliographers stand in justified awe at what Falconer Madan called the "duplicity of duplicates." Even so, there is good work to be done in developing conservation programs with the bibliographical record in mind.

We should also remember that today's most conspicuous, and sometimes the most successful, restriction programs approach the problem from the opposite direction, controlling readers rather than materials. To handle the Dead Sea Scrolls in Jerusalem, or the Book of Kells in Dublin, or the Washington or Adams papers in Boston, one must present established credentials. Restrictions like these, of course, have obvious analogies in the scientific community: it is very difficult, I suspect, to go in off the street in Los Alamos and be allowed to smash a few atoms, or to use "state-of-the-art" machinery in our great research labs. What is called for are credentials, and a "need to know."

Restricting readers is a treacherous business, as public librarians in particular can assure us. My own experience at the Newberry in the early 1960s suggests that the choice is between the arbitrary and ridiculous, and the flexible and ridiculous. Admit only card-carrying members of professional societies? Exclude high school students (thereby allowing high school dropouts to be admitted)? Admit only those over eighteen (thereby excluding the precocious)? Exclude those who demonstrably haven't bathed in six months? Such are among the considerations that always have made and always will make library work essentially labor-intensive, and more to the point, learning-intensive and sensitivity-intensive. As for that frightening phrase, "need to know," it can only evoke the most negative impressions of Big Brother, officially sanctioned research, and intellectual suppression. It is very hard to justify on any grounds, except perhaps in dealing with sleight-of-hand artists or those Christian Scientists<sup>24</sup> with known kleptomaniac tendencies.

Furthermore, the natural—at least, the desirable—outgrowth of greater control is an enlargement (or redefinition) of our rare book facilities. Can we afford this? Even if we should look for a model in such operations, it is well to remember that so many of them are more impressive than functional. The carpets may be thick and the tables big, but usually the paging is inadequate, the room badly controlled (either from the external entry or from the bookstack entry if not from both), the space

extravagant, and the noise level high; and the changing needs of readers—for typing, spreading out papers, storing many books, conversation, using the telephone—badly accommodated. Meanwhile, our instincts for control through closed-circuit television do battle with our faith in civil liberties. (I could accept the former; many of my more conservative colleagues could not.) Do we really want *all* of our Keplers around under such circumstances—further remembering their propensities for distracting the staff with idle chatter and endless complaints? Furthermore, in time our Keplers have more than once ended up thinking they own the place.

One sensible-sounding alternative may be seen, mostly in European libraries. One is expected to use a photocopy first, turning to an original only as a “last resort.” The practice is beset by two fallacies, the one almost but not quite facetious, the other very real. On the facetious side: how can one expect to see anything at all after one has been blinded by badly designed microform reading equipment? More real: what can one expect to find in the photocopy if one is not alerted by idiosyncrasies not picked up from the original? Occasionally a very well done photofacsimile will suggest differences in paper, such as might point to different printing conditions. But the recently returned holograph music manuscripts in East Berlin clearly show different darkness in the ink on various pages, distinguishing composers’ first thoughts from their afterthoughts, such as were not noticeable on the luxurious facsimiles prepared before the War. As for the laboratory documentation in a scientific experiment, it is well to remember that falsification with an eraser will hardly ever be detectable, and never provable, on a photocopy.<sup>25</sup> A scholar needs “best evidence,” and for all their great and monumental advantages the problem with photocopies of any kind is that you can’t tell what you can’t tell. The problem is not one of graphic resolution, of definition being lost; rather, what is lost—the ultimate irreversibility—is the evidence itself. On much published matter there is likely to be no problem, other than the fundamental problem of when to know that you may have a problem.

One step beyond the library-backup to photocopy consultation, in which one has final recourse to the original, is the library set up exclusively for preservation, accessible only through photocopies. This is the library set up by Gordon Williams at the North Pole and moved by Edwin Williams to the Greenland Icecap.<sup>26</sup> By way of contributing to this particular dialogue, let me introduce the possibility of refrigerated bookmobiles, traveling through our Western states disguised as portable silos. Besides confusing the Russians, such a plan would stimulate the national economy (especially the manufacturers of refrigerated bookmobiles), and it would make library statistics in these states all the more impressive. More seriously, we do have an interesting model for restricted access in the *National Register of Microform Masters*. As stated in the introduction to



the volumes of the *Register*, the principle is that "no film is listed...which, to the knowledge of the editors, is available for patrons or clients of an institution to use as a reading copy." The principle is well delimited, even if the enforcement is less than trustworthy; and above all, the appropriateness as part of the overall plan for conserving library materials, while very useful, is still secondary.

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In 1749 Lord Chesterfield announced to his son: "Due attention to the inside of books, and due contempt for the outside, is the proper relation between a man of sense and his books."<sup>27</sup> His sentiments, misguided as they are, do hold wide favor in our scholarly communities, even in our own community of librarianship as well. At times, considering the vastness and the complexity of the problem, we can understandably sympathize. But for better or worse, the classic distinction between physical form and intellectual content will not go away. No matter how illustrious or preoccupied the scholar, the medium is necessary, with all of its limitations and peculiarities. Our scholars' access is through that medium. And their rights to access extend into the future as much as they exist today. If their own contributions are to be available a hundred years hence, they must be asked to be sensitive to the problem, and sympathetic to the need for policy and to the inevitable shortcomings of our programs. Kepler could be part of that scientific tradition that plotted and thus predicted the courses of the planets. The course of the use of books and libraries through history, on the other hand, if it will or should ever be predictable at all, is a matter to be understood some distance in the future. Conservation and civilization have to depend on one another.

## NOTES

1. See Kepler, Johannes. "Prooemium." In *Gesammelte Werke*, edited by Max von Caspar, lines 181-84. Munich: C.H. Beck, 1940. (Si ignoscitis, gaudebo; si succensetis, feram; jacio en aleam, librumque scribo, seu praesentibus, seu posteris legendum, nihil interest: expectet ille suum lectorem per annos centum; si Deus ipse per annorum sena millia contemplatorem praestoatus est.)

2. In this discussion it can rather simplistically be assumed that (a) any reader who reads a lot is a scholar, (b) any scholar who stops reading a lot is no longer a scholar, and (c) any further attempt at differentiation would be presumptuous. On such naïve and hopeful assumptions the work of the conservator, necessarily, must be based. This approach would not of course be appropriate to many other discussions of the scholarly use of libraries.

3. Haas, Warren J. "Author's Abstract." In *Preparation of Detailed Specifications for a National System for the Preservation of Library Materials*, compiled by the Association of Research Libraries, p. ii. Washington, D.C.: HEW, 1976.

4. Blades, William. *The Enemies of Books*. London: Elliot Stock, 1888.

5. Adams, Randolph G. "Librarians as Enemies of Books." *Library Quarterly* 7(July 1937):317-31.

6. Land, Robert H. "Defense of Archives Against Human Foes." *American Archivist* 19(1956):122.

7. I say this in respectful deference, of course, to Isaac Asimov's "Foundation and Empire" books.

8. I must confess to having failed to find the best source. Adams's general idea is that he really needed three copies of a given rare book (sometimes specified as the Nuremberg chronicle): one for readers to read, one for exhibition (or, as sometimes cited, for the local Boy Scouts to examine), and one to be preserved for posterity. Other classic differentiations between the kinds of reading would probably be no less usefully applied to the matter of conservation, i.e., Coleridges's sponges, sand-glasses, strain-bags, and mogul diamonds; Richard Heber's show, use, and borrowing (perhaps Adams's model); Sir John Denham's wisdom, piety, delight, and use; and above all Bacon's ants, spiders, and bees analogy, also the essay on studies.

9. Among the few writings on the subject, see Jackson, William A. "Some Limitations on Microfilm." *Papers of the Bibliographical Society of America* 35(1941):282-88; and Cummings, Lawrence A. "Pitfalls of Photocopy Research." *Bulletin of the New York Public Library* 65(1961):97-101.

10. Wilson, F.P. "Shakespeare and the 'New Bibliography.'" In *The Bibliographical Society, 1892-1942: Studies in Retrospect*. London: The Bibliographical Society, 1945, p. 95.

11. The distinction is well developed in Tanselle, G. Thomas. "Bibliographers and the Library." *Library Trends* 25(April 1977):745-62. See also, Brynolfson, Gaylord. "Book as Object." In *Preservation of Library Materials*, edited by Joyce R. Russell, pp. 45-49. New York: Special Libraries Association, 1980.

12. The literature has been well surveyed recently in Gapen, D. Kaye, and Milner, Sigrid P. "Obsolescence." *Library Trends* 30(Summer 1981):107-24.

13. Quoted in Starrett, Vincent. "'High Spots' and Other Mysteries." in his *Books Alive*, p. 348. New York: Random House, 1940. Other relevant impressions are suggested in Bamberger, Fritz. *Books are the Best Things: An Anthology from Old Hebrew Writings*. Philadelphia: Maurice Jacobs, 1962, p. 14. ("A teacher should not strike his pupil with a book, and the student should not ward off a blow with a book....Do not use a book to protect yourself against sun or smoke. Do not keep books together with food lest mice be lured by the food to nibble at the books. If a book does not close easily, do not force it together with your knees.")

14. Quoted in *LJ Hotline* 10(26 Oct. 1981):1.

15. Collections and analysis of the handling statements distributed by libraries to their readers could be a very useful effort. Notable among these is the one used in the North Library at the British Library (copies of which were kindly supplied by Mr. David Paisey). Some statements involve particular library settings ("Do not put books on the floor"), but others would seem to be more widely applicable ("Do not lean on books while reading," or "Do not write on paper resting on a book, open or closed"). Above all, the tone of Nicolas Barker's statement strikes a happy balance between talking down and talking up to the readers. For an alternative that captures the element of slapstick, see the 24-page pamphlet prepared by the Public Archives of Canada in 1977, entitled, *A Guide to the Preservation of Archival Materials*. Bibliographic instruction, meanwhile, should not be overlooked as a forum for introducing to readers the concern for proper handling.

16. The basic points are well explored in Press, Richard L. "The Non-Circulating Academic Research Library: A Paradigm for Change." *Library Journal* 98(1973):2821-23.

17. Banks, Paul N. "Some Problems in Book Conservation." *Library Resources & Technical Services* 12(1968):332ff.

18. Paraphrased and summarized in *LJ Hotline* 10(26 Oct. 1981):1.

19. Tanselle, G. Thomas. "Book-Jackets, Blurbs, and Bibliographers." *The Library*, 5th series, 26(1971):91-134.

20. ————. "Non-Firsts." In *Collectible Books: Some New Paths*, edited by Jean Peters, pp. 1-31. New York: Bowker, 1979.

21. Under the circumstances, particularly relevant to this discussion is Asheim, Lester. "Not Censorship but Selection." *Wilson Library Bulletin* 53(1953):63-67.

22. The basic statement, to my knowledge, is the brief presentation in the second paragraph under the rubric 4.4.2.1 in Association of Research Libraries. *Preparation of Detailed Specifications for a National System for the Preservation of Library Materials*. Washington, D.C.: HEW, 1976, p. 20.

23. Starck, Taylor. "The Fate of Old Low German Printings: A Preliminary Report." In *Humaniora; Essays in Literature, Folklore, Bibliography Honoring Archer Taylor*.... Locust Valley, N.Y.: J.J. Augustin, 1960, pp. 69-77.

24. The legend, whether in fact true or not, is described, for instance, in Braden, Charles S. *Christian Science Today*. Dallas: Southern Methodist University Press, 1969, pp. 187-89.

25. Scientific experiments, to be accepted by the scientific community, must be replicable; but meanwhile, the precise evidence on which the inferences were based, or even the exact conditions necessary for the replication cannot always be uncontrovertably specified in the published description. It is not always so much that the limitations of the publication format will exclude the detailed peripheral information that specifies exactly what evidence was recorded and what delimitations were accepted, but rather that the delimitations are themselves likely to be the subject of subsequent concern. Archival preservation of raw data and other primary records is likely to be ultimately crucial, commensurate of course with the protection of such confidence as may be appropriate in work with human subjects. The importance of primary evidence should haunt the reader of such major writings on scientific frauds as Zuckerman, Harriet. "Deviant Behavior and Social Control in Science." In *Deviance and Social Change*, edited by Edward Sagarin, pp. 87-138. Beverly Hills, Calif. and London: Sage Publications, 1977; also for some of the discussions of specific instances, see Willmott, Peter. "Integrity in Social Science—the Upshot of Scandal." *International Social Science Journal* 29(1977):333-36; or Hunt, Morton. "A Fraud that Shook the World of Science." *New York Times Magazine*, 1 Nov. 1981, pp. 42-75 *passim*. In this field, the work of the Joint Committee on the Archives of Science and Technology (involving the Society of American Archivists, the History of Science Society, the Society for the History of Technology, and the Association of Records Managers and Administrators) is particularly important; and a key document is their "Premilinary Report" on *The Documentation of Science and Technology in America: Needs and Opportunities*, May 1980, see especially pp. 19-21. An important related perspective is provided in Lide, David R., Jr. "Critical Data for Critical Needs." *Science* 212(19 June 1981):1343-49.

26. Williams, Edwin E. "Deterioration of Library Collections Today." *Library Quarterly* 40(1970):16.

27. Lord Chesterfield to his son, letter 174, 10 Jan. 1749, as quoted in his *Works*. New York: Harper, 1855, p. 239.